



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE STOCK EXCHANGE AND THE MONEY MARKET

BY HORACE WHITE,

Chairman New York Committee on Speculation in Securities and
Commodities, 1909.

The relations of the stock exchange and the money market to each other are primarily those of the promoter and the investor, and secondarily those of the borrower and the lender.

The distinction between money and capital should first be noted. Capital consists of all the goods in the world that are subject to sale and transfer. Money is an instrument of exchange, the possession of which gives the owner command of capital at the prices prevailing at any given time. The supply of capital is, in the nature of things, limited. Both the production and the consumption of capital go on at all times. The excess of production over consumption forms new capital available for the creation of additional means of production, from which income may be derived. The owners of this excess may themselves apply it to this purpose, or transfer it to others. Ordinarily an easy money market means that the demand for capital is not in excess of the supply. Conversely a tight money market means that the demand has overtaken the supply and that men are bidding against each other for the possession of it; the competition of bidders causes general prices and the rate of interest to rise.

The function of the stock exchange as a promoter of new enterprises consists of its great clientage of buyers, of its facilities for advertising securities, and of its reputation for carefulness in scrutinizing applications for admission to its list. Its buyers are practically innumerable in both hemispheres. Its quotations are published free of cost in nearly all daily newspapers. No enterprise is admitted to its trading list without previous examination by a committee of experts. While the exchange does not guarantee the goodness of any security, or even the truthfulness of the statements filed by its managers, it requires the filing of such statements prior to admission, and at stated intervals thereafter, and it inflicts summary punishment for any breach of good faith therein. Thus, the fact of

admission to the list becomes *prima facie*, although not conclusive, evidence of the character of the investment.

The money market consists of all the loanable funds in the country. The money which people are using in their daily business, which passes from hand to hand in retail trade, is no part of the money market. Such money is not marketable because it cannot be recalled from the immediate service which it is rendering to society. The bulk of loanable funds of the country consists of bank credits which are bottomed on gold; and the magnitude of such credits is limited by the amount of "lawful money" held by the banks as reserves. Bank notes are not available as reserves of national banks, although they are such for state banks and trust companies. This is a slovenly and dangerous practice which ought to be corrected by the clearing houses of the country, if the state laws allow it to continue. Any attempt, however, to enlarge the loanable funds of the banks by "taking out" bank notes not needed for hand to hand circulation, would be defeated by their prompt return for redemption in lawful money.

A certain amount of loanable funds is always held by private persons, but since they usually keep their money deposited in banks the portion which they draw out lessens the amount which the banks can use in the loan market. The lending power of these institutions in the aggregate may be many times greater than the amount of the lawful money in their vaults, since ninety per cent or more of the trading which takes place in our large cities is done by means of bank credit and clearing house transactions.

The most common function of banks is the discount of commercial paper running for short periods of time and representing actual transfers of property in the business world. In this way the bank exchanges its well known credit for the less known credit of merchants and manufacturers. An ideal condition for a bank is one wherein the supply of good bills is sufficient to absorb all of its loanable credit and where the inflow of cash from maturing ones is equal to the outgo of new ones. There is always some difference, however, in the character and quality of bills offered for discount, and when the amount of acceptable paper is less than the amount of the bank's loanable funds, advances may be made on goods or securities that are readily salable in the market. In this way interest is earned on money that would otherwise remain idle. In

the event that securities of this character are not available at home the banker may place his surplus funds as deposits payable on demand in some other place where such securities are bought and sold. Usually a low rate of interest, say two per cent, is allowed on such deposits.

The piling up of these deposits in the banks of New York lowers the rate of interest on call money and incites speculation. If Union Pacific, for example, pays dividends of ten per cent and is selling at 170 or under, it yields 5.6 per cent on the purchase price. If the purchaser can borrow money on call at one and one-half per cent, as is the case now, he gains a profit of three and one-half to four per cent as long as such conditions continue. Speculation thus started may run a considerable time and draw in a large number of participants and extend sympathetically to the whole list. Speculators may bid up the price of stocks, and the rate of interest at the same time, until a climax is reached. Then a reaction will come, stocks will fall, margins will be exhausted, speculators will be sold out, banks may fail, liquidation will pursue its inexorable course, and a *tabula rasa* will be made, upon which a new cycle of inflation and collapse may take its start.

The essential difference between the two methods of employing a bank's resources is that discounted bills are always bringing in the means of payment of the banker's liabilities, while loans on collateral, whether payable on call or at a fixed time, depend on the sale of the securities, the selling of which may be restricted, or prevented altogether, by the lack of buyers in the market. This is an important difference. In Germany the Reichsbank is not allowed to *issue circulating notes* against collaterals, not even government bonds, while it may issue them to any extent against one-third cash and two-thirds bills discounted having not more than three months to run. Moreover, a higher rate of interest is charged on collateral securities than on bills. The aggregate amount of loans on collateral in the Reichsbank does not usually exceed fifteen per cent of the whole. An explanation of this practice is given by Dr. Koch, former president of the Reichsbank, in a paper reprinted among the documents of our National Monetary Commission, as follows:

For a bank of issue, the aggregate of whose investments must always be on a level with that of its obligations, it is not merely a question of safety, but fundamentally of the liquidity of the investments. No person who has any

acquaintance with such matters will believe that loans on securities can be compared with discounts, represented by bills carefully chosen according to sound principles of banking, with respect to the possibility of quick realization. Loans on securities are always lacking in the quality of transparency, it being often not easy to see what is behind them. They do not rest in all cases on a basis of substantial business dealings like commercial bills, and in particular bills drawn against the delivery of merchandise, which always presupposes the existence of the equivalent in commodities, or as the net proceeds of a sale. In general there are no indications as to how the credit sought is going to be used, while the probability of punctual payment depends upon just this factor. It is thus possible that the bank may be compelled in time of crisis, when its own customers are falling into arrears, to proceed to realize on securities in great quantities in order to protect its 2,000,000,000 marks, or more, of demand liabilities. There are times when it is impossible to realize on them, or at least not practicable without great losses.

The Reichsbank, although owned by private persons, is administered by the state. The profits of the shareholders are not the first consideration of the management. The public advantage takes precedence, and this is found to be best served by limiting advances on collaterals as aforesaid.

The stock exchange is a meeting place of the buyers and sellers of invested capital; that is, of incomes present or prospective. This is a comparatively modern institution because invested capital transferable by negotiable instruments is of modern origin. There were exchanges in the ancient world where traders met to deal in various kinds of movable goods. The Agora of Greece, and the Forum of Rome, and the Fairs of the Middle Ages were such exchanges, but negotiable incomes (stocks and bonds) did not then exist. At the present time no person of intelligence keeps surplus money uninvested. He buys some interest-bearing security, or puts it in a savings bank, in which case the savings bank buys an interest-bearing security, or employs it in such manner as to yield an income.

Capital is the result of saving. If not the parent of civilization, it is the indispensable promoter and handmaid of it, since capital gives mankind the leisure and the means to take new steps forward in solving the problems of human existence. It is desirable that there should be facilities for investing the savings of the people without serious delay. Such facilities promote saving. It is desirable also that investments should be reconvertible into cash without delay. The *raison d'être* of a stock exchange is to supply a place where money can be invested quickly, and recovered quickly, or

upon which the investor can borrow money immediately if he so desires. It is an incidental advantage that the stock exchange informs all investors, and intending investors, daily and without cost to themselves, of the prices at which they can buy or sell the securities on the active list of the exchange. These prices are made by the competition of buyers and sellers in the market, who are acting under the spur of self-interest. There is no other way in which true prices can be made. If the quotations so made are not precisely the truth in every case, they are the nearest approach to it that mankind has yet discovered.

The gross amount of negotiable securities admitted to the New York Stock Exchange is upwards of twenty-five billions of dollars, as shown in the following table as of the date of June 6, 1910:

Railroad bonds	\$7,181,949,250
Railroad stocks	7,205,766,185
Industrial bonds	632,446,350
Industrial stocks	3,011,885,300
Street railway bonds.....	633,206,000
Street railway stocks.....	475,659,900
Telegraph and telephone bonds.....	245,400,200
Telegraph and telephone stocks.....	530,994,700
Gas and electric light bonds.....	201,537,000
Gas and electric light stocks.....	267,366,000
Coal and iron bonds.....	84,810,500
Coal and iron stocks.....	140,781,800
Mining stocks	347,052,000
Miscellaneous stocks	233,532,700
Miscellaneous bonds	249,257,000
Banks and trust companies	134,592,800
Express companies	68,967,300
U. S. Government bonds.....	847,891,230
Foreign government bonds.....	2,293,859,300
State government bonds.....	85,403,943
New York City bonds	422,614,600
Other city bonds.....	19,455,000
	<hr/>
	\$25,314,429,058

The sales of securities on the exchange during the calendar year 1909 were upwards of twenty billions of dollars cash value. Such figures are like the distances of the fixed stars; the human mind fails to grasp them. They do not, however, tell the whole

story, for there are two other exchanges in New York which deal in negotiable securities and there are stock exchanges in Boston, Philadelphia, Pittsburgh, Chicago, San Francisco, Montreal and several other cities, which are accessible to investors and speculators on this continent.

Under the rules of the New York Stock Exchange every trade made on the floor must be settled and completed within twenty-four hours, unless otherwise specified; *i. e.*, the seller must deliver the thing sold, and the buyers must pay for it in full, at or before 2.15 p. m. of the day following the transaction. All but an insignificant part of the trading on the exchange is of this kind. If all the purchasers should pay in full with their own money there would be no resort to loanable funds. But probably nine-tenths of the transactions are speculative. In such cases a portion of the money, say ten or twenty per cent, is supplied by the buyer, and an equal sum by the broker who makes the purchase, and the latter borrows the remainder from a bank, giving the stock or bonds so bought as security for the loan. The amount advanced by the purchaser is called the margin, and there is always an agreement, express or implied, that the margin shall be kept good in case the market price of the securities declines. If the purchaser fails to respond when called upon for more margin, the broker may sell him out. The bank exercises the same privilege as against the broker. The bank may call upon the broker at any time and without assigning any reason. The percentage of the margin that may be required is a matter of bargain between the parties. If a stock is very active, *i. e.*, if there is always a large number of people trading in it, the variations, although frequent, are likely to be small, hence a small margin will suffice. If, however, the security is seldom bought or sold, a large margin is required, because a quantity may be offered suddenly to be sold for what it will bring, and there may be no bid for it at or near its customary quotation.

The making of bank loans to stock brokers is bottomed primarily on the confidence which the banker has in the broker as a person, and secondarily on the goodness of the securities offered. The *modus operandi* is substantially this: The broker, knowing from his clearing sheet of yesterday what payments he has to meet to-day, obtains from his bank in the morning authority to draw for this aggregate amount at an agreed rate of interest. As his

checks come in during the day the bank certifies them and the broker sends to the bank securities whose market value is greater by a certain margin than the amount borrowed.

These loans are usually payable on call. As national banks are forbidden by law to certify checks for a sum greater than the drawer of the checks has on deposit, the practice in such cases is for the broker to execute a promissory note, which note the banker discounts, putting the proceeds to the credit of the broker, and attaching the security to it as it comes in during the day. While this method exposes the banker to some danger of loss in the interval between the certification of checks and the receipt of the securities, such losses seldom occur. There is an unwritten rule of the stock exchange that the bank must be protected at all hazards, both as a matter of personal honor and because the stock brokerage business cannot be carried on otherwise.

But it happens sometimes that the broker himself is suddenly disabled. Such a case happened in the Columbus and Hocking Coal and Iron speculation a few months ago. Here the broker was confronted with a precipitate fall of fifty or sixty points in a stock that he and others were "manipulating," or at all events supporting, by purchases on the exchange. Three banks that had loaned their credit to him in the customary way sent hastily to the broker's office to demand security. The one whose messenger arrived first took all that the debtor could lay his hands on, but the amount was not sufficient. The others got nothing. The brokerage firm went into the hands of a receiver in bankruptcy, and the receiver made a demand upon the bank which had been so alert in collecting its claim, to surrender, as assets of the bankrupt estate, the securities so obtained. The national law forbids the giving of a preference to any creditor in case of impending failure: and thereby hangs a lawsuit which is still pending, and which may lead to radical changes in the business methods of the stock exchange and the money market. Doubtless the case will be carried to the highest court since it involves the question whether stock exchange securities pass by delivery in cases where bankruptcy is apprehended, and also what facts justify the presumption of approaching bankruptcy.

However these questions may be decided, the Columbus and Hocking example shows that it is not safe for bankers to rely upon the quotations of the ticker alone to assure them of the goodness

of stock exchange securities. If these can drop suddenly fifty points, no lenders on collateral are safe. They must have better knowledge of the character of the security they accept than the figures which the borrowers themselves may cause by bidding up prices. The ticker is not an infallible guide, nor is it the only guide which the stock exchange supplies. It requires all companies admitted to the stock list to file reports of their financial condition from time to time. If lenders do not avail themselves of this information, or if they misinterpret it, they have only themselves to blame.

The relations of the stock exchange and the money market are those of borrower and lender, but they are by no means as simple as they seem. The twain are gigantic bodies which act and react upon each other like planets revolving around a common center. It is a problem of great complexity to find the causes of the conditions prevailing at any time. Still more difficult is it to predict what conditions may prevail six months hence.

The state of the money market at the present time (August, 1910) aptly illustrates the complexity of the problem. The rate of interest for call money on stock collaterals is between one and two per cent—a very low rate. On short-term notes of good corporations, however, it is from five to six per cent, while first-class dividend-paying stocks can be bought at prices which yield the investor six to seven per cent. Money is flowing to New York from the interior, and the city banks are paying two per cent interest for country bank deposits. The surplus reserve of the city banks is upwards of fifty million dollars, the ratio of reserve to deposits being much above the legal requirement. Under such conditions a visitor from Mars would infer that money was very easy, but it is not so. The fact that it is otherwise is proved by the recent importation of gold from Europe, and also by the sudden movement of bankers to prepare for using the note-issuing privileges of the Aldrich-Vreeland act, which they have neglected during the past two years. In fact, money is tight for everybody except stock speculators. The explanation of the phenomenon is that the present is a period of distrust. The men who control the loanable funds of this country and of Europe as well, are not willing to let it go out of their hands except for short periods. Money is loaned at very low rates on call because it can be recovered quickly.

But how, it may be asked, can our city banks pay two per cent

for country deposits and lend the same money at one and one-half per cent? The answer is that it is sometimes better to lose half of one per cent than to lose a customer. Moreover, the city bank does not make all of its stock exchange loans at call. It makes some for fixed periods at rates varying from three per cent upwards, according to the time they run and the character of the borrower and his securities.

Periods of confidence and periods of depression come and go in undulations. The business world has had its ups and downs, not exactly with regularity but with something approaching it, during the past three centuries. The essential factor and prime cause of a commercial crisis is speculation leading to inflated prices and the piling up of debts based upon such inflation, which the debtors cannot pay. We had such a crisis—one of the first magnitude—in 1907. There is no evidence that the crisis was due in any special manner to stock speculation. Doubtless stock trading ran *pari passu* with other trading—it generally does. The inflation which prevailed generally did not avoid the precincts of the stock exchange, but that institution was not a sinner above others in bringing down punishment. It was the most conspicuous sufferer, however. More columns in the newspapers were given to it, more eyes were turned upon it, than upon any other. So when the rate of interest in the "loan crowd" went up momentarily to 125, there was a shock in the financial world. But the plight of the man who paid 125 per cent over night or for a few days, in order to avoid a greater loss, was not so bad as that of the merchant or manufacturer, who could not get his paper discounted at all. The benevolent usury law prevented him from paying more than six per cent and there was no money to be had at that rate on a commercial basis—none except as a matter of favor.

Banks find it for their interest to take care of their regular customers in times of panic, but they have the right to discriminate, and they exercise it. The temptation of 125, or even twenty-five, per cent is not easily resisted. Here the stock exchange exercises an influence on the money market. It can draw money from the banks that ought to be at the service of productive industry. Even banks which have no stock brokerage business of their own, sometimes turn money into the vaults of trust companies in order to reap the profit of high rates on the exchange. But this signifies

merely that water will seek its level, and that money tends to go to places where the highest reward is offered for it. This is the reason why city banks allow interest at two per cent on the balances of country banks subject to check. There is a borrower at hand who can usually pay more than two per cent for call money. The country banks must keep some balance in the city banks for the convenience of their customers. They are allowed to keep three-fifths of their legal reserve in a city bank. The law lends its influence to this extent to the piling up of money for the use of stock speculators. This system is sometimes fraught with danger, and the question has been under debate for half a century whether the payment of interest on deposits ought to be allowed at all.

How to prevent it is a question perhaps even more difficult of solution. If national banks were forbidden to pay interest on deposits, the prohibition would not extend to the state banks, trust companies and private bankers. These would pay interest for the surplus funds of the country banks; and the national banks would thus be at a disadvantage. If the country banks in the national system were not allowed to keep three-fifths of their reserves in the city banks, they would compete at a disadvantage with the state banks in their own localities. Thus the advocates of prohibition of interest on deposits always come to an *impasse*, and the old system continues. It continues because "there is money in it." It has an economic basis. I see no reason why the country banker should not make the most profitable use of the surplus funds in his charge. Self-interest prompts him to take care of his own customers first. If he does not do so, they will soon leave him. After he has done that he may properly place his surplus in a city bank of good repute and receive interest for the same. The fact that there may be a general crisis, say once in every ten years, and a spasmodic grab for bank deposits, is a problem by itself, which may be open to more than one solution. Any arrangement which should quiet the fears that lead to the grabbing of deposits would effect a cure of this disorder. This end is secured in most European countries by means of a central bank of issue.

In conclusion it may be said that the relations of the stock exchange to the money market as a borrower are of the same nature as those of the produce exchange and of the cotton exchange. The only difference is in the magnitude of the transactions. The stock

exchange is so large, its borrowings at times so colossal, that they affect the money supply of the world and are capable of absorbing the last dollar that can be tempted from the vaults of banks or the pockets of individuals in both hemispheres. This absorption may take place by the rise of prices of the securities traded in, or by the quantity offered, or both. Usually the demand for money is most imperative when the prices are highest and the quantities greatest. The question whether this condition is an evil, is in effect the same as asking whether speculation is an evil. Upon this point Governor Hughes's committee on speculation in securities and commodities last year, reached the conclusion that to some persons it is an evil, and to others not, and that there is no way to prevent it, without putting an end to trading altogether. In that view the writer concurs. It should be added that speculation has a steadying effect on the market prices of both securities and commodities. To banish it would be to banish nine-tenths of the business, in which event the fluctuations in prices would be much greater, and the work of the manipulator more facile and dangerous, than now.